



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

DUTCH CARTOGRAPHERS OF THE SEVENTEENTH CENTURY

By W. REDMOND CROSS

Through the long turmoil of the sixteenth century in Europe, while liberty battled grimly against the Spanish plan for world dominion, one thought recurred persistently to the minds of all classes. To be sure, the form of the thought varied with the thinker, for each class thought of the thing which it desired. The king saw a new empire, the peasant dreamed of a home free from wars and feudal taxes, the merchant planned a lucrative trade in valuable commodities, the priest had visions of millions of unbelievers brought into the fold, and the adventurer had before him a field brimming with excitement and containing possibilities of boundless reward. Hopes differed, but all had the same source. In palace and cottage, in banking house and cloister, one subject of discussion never failed—the New World.

This widespread interest naturally led to a demand for maps to aid in the visualization of the newly found lands, and the result was a development in the science of cartography that was remarkable. The artistic possibilities were also appreciated, and a great deal of progress was made in the decoration both of the map proper and of the surrounding border. For the first the usual method was to introduce ships and marine monsters at sea and to people the land with beasts and savages. More elaborate work was done on the borders, particularly in the *mappemondes*, and they frequently contain compositions of great beauty. The cartouches upon which appeared the name of the map and its maker were usually highly decorated. The improvement for the century reached its high point in the genius of Mercator and the industry of Ortelius, who were the first cartographers to give a tolerably correct picture of the outlines of America and who should be recognized as the foundation stones of the school which is the subject of this article.¹

DUTCH SUPREMACY ON THE OCEAN

The successful defence of the United Provinces against the mighty power of Spain was followed by a period of extraordinary prosperity. Dutch

¹ On this general topic see:

Justin Winsor: The General Atlases and Charts of the Sixteenth and Seventeenth Centuries, in "Narrative and Critical History of America," edited by Justin Winsor (8 vols., Boston and New York, 1884-89), Vol. 4, pp. 369-377.

P. L. Phillips: A List of Geographical Atlases in the Library of Congress, with bibliographical notes, 3 vols., Library of Congress, Washington, D. C., 1909 and 1914.

Woodbury Lowery: A Descriptive List of Maps of the Spanish Possessions Within the Present Limits of the United States, 1502-1820, edited, with notes, by P. L. Phillips, Library of Congress, Washington, D. C., 1912.

captains penetrated into the remotest corners of the seven seas, and Dutch merchants captured the carrying trade of the world. For almost a century they reigned supreme in oceanic traffic, and it took three naval wars to prove that the English were their masters in this field. As late as 1667 Admiral de Ruyter sailed up the Thames and burned the English fleet at Chatham, and it was not until after the governments of the two countries were joined by William III in 1688 that the English definitely took first place in high-seas commerce.

The arrival at Amsterdam, Rotterdam, or Dordrecht of a merchantman from the other side of the world was a matter of almost daily occurrence, and it is pleasant to picture the welcome given to the home-coming captain with the solid burghers sitting about him and listening to his tales of discoveries and wondrous adventures in unknown lands.

THE BUSINESS OF CARTOGRAPHY

The demand for maps created by such conditions made the business of cartography a profitable one, and the commercial ability of the Dutch showed itself in the keenest kind of competition between the different publishing houses. They vied with each other in the issuance of sumptuous volumes, which, from the standpoint of beauty, far excel the atlases to which we are accustomed today. To understand the conditions under which almost all of the maps of this time were produced it must be borne in mind that they were issued by publishing houses, for the most part large establishments, each of which had its staff of draftsmen and engravers, so that it is impossible to tell how much work, if any, was done on a given map by the man to whom it is attributed. Jodocus Hondius and W. J. Blaeu, for instance, probably did most of the work on the maps issued by them; but their successors became, more and more, merely publishers who decided when to issue a new atlas, whether the circumstances justified the cost of preparing a new plate, and similar questions of business policy. The growth of the business aspect at the expense of the professional point of view is also indicated by the contents of the atlases, which in the second half of the century sometimes include a preponderance of plates procured from other sources than the workshop of the issuing house.

THE HOUSE OF HONDIUS²

The first great name of the period was Jodocus Hondius (1563-1611), who not only succeeded to the business of his brother-in-law Rumoldus Mercator and thereby came into possession of the plates of the famous Gerardus Mercator, but was himself an excellent workman. His maps are a delight to the eye and in some respects exhibit an accuracy which is lacking in the product of his later rivals. He founded the series of Hondius-

² See L. A. J. Quetelet: *Histoire des sciences mathematiques et physiques chez les Belges*, Brussels, 1854, p. 116 ff.

Mercator atlases, beginning with the second edition of the great Mercator, and gradually added his own plates, dropping his father-in-law's as they became antiquated. This monumental work was carried on by his son Henricus Hondius and son-in-law Joannes Janssonius and was issued in more than two dozen editions in many languages.

The younger Hondius (died 1638) was diligent in his chosen profession and was responsible for many good plates, but he cannot be classed with his father as a cartographer and had less influence on the movement than his brother-in-law Janssonius (died 1666), who produced many magnificent volumes under his own name, in addition to the work which he did on the Hondius-Mercator series.

REPEATED USE OF THE SAME PLATES

Excellent as was the work of the engravers in the decorations with which they embellished their maps, it is interesting to note that the thrifty Dutchman did not often indulge in the expense of copper and engraving merely in order to illustrate the latest reported discoveries. A plate once made was used again and again, and prints were taken from it long after it was recognized as cartographically inaccurate. Minor changes were often made on plates, resulting in different "states" which form a study in themselves. This conservatism of the makers of maps caused the perpetuation of many mistakes, of which the Island of California is a famous example. Founded on a supposed voyage from the Straits of Anian to the Gulf of California, the error appears on most of the maps of the last three-quarters of the seventeenth century and also in the eighteenth century long after its falsity had been demonstrated through the passage by land from New Mexico to California by the Jesuit Kino in 1698-1701.

ENGRAVERS' NAMES

The names of many engravers have come down to us because they were apt to try to attain immortality by cutting their names in some corner of the plate. The nomenclature of the maps is full of pitfalls, as the purchaser of a plate often replaced the name of the maker by his own and then issued the map without other change. Latinization of names was usual, as it was with authors of the period, and the simplest method seems to be to refer to the publishers by the names which they were accustomed to sign on the maps. This rule is not, however, always easy to follow, as for example in the case of the Visscher family. Nicolaas Visscher (1618-1679), apparently fearing that the public would not buy his product without the authority of a well-known name, usually added a middle initial and signed his maps Nicolaas (or N.) J. (or I.) Visscher (or Piscator). This was the name of his father (died 1637), who increased the confusion by often signing himself C. (for Claes) J. Visscher (or Piscator). In the third generation Nicolaas Visscher (1649-1709) was not so modest and signed his

own name; but, as practically none of the maps are dated, it is sometimes difficult to know which member of the family to credit with a given plate. Some of the best work of the century was turned out by this house, which, founded in 1615, was handed down from father to son until 1717, when the plates became the property of Pieter Schenk.

COLORING

The coloring of the maps was done by hand in water colors and the color scheme and technique, particularly in the case of prints from the more elaborately decorated plates, was difficult enough to justify the classing of this department as an art in itself. The larger establishments had their own colorists; but there were many outsiders who earned their living by coloring maps, and the profession was a well-recognized one throughout Europe. The quality of workmanship in the coloring of maps varies greatly and constitutes a not unimportant criterion in the eyes of the modern collector.

THE HOUSE OF BLAEU³

Encouraged by the prosperity resulting from the Twelve Years' Truce with Spain, W. J. Blaeu (1571-1638) founded in 1612 the famous publishing house which, controlled after his death by his sons and grandsons, had a larger output than any other establishment in the seventeenth century. The first atlas was not published until 1631, but the elder Blaeu was tireless in his efforts and produced a large number of splendid plates which were used by his son Joannes (1596-1673) in the atlases published by him. The product of the house of Blaeu was unexcelled for beauty and workmanship, and while, as was customary, the plates were used long after they had become antiquated, they fairly represented the extent of geographical knowledge attained at the time of their engraving.

FREDERICK DE WIT

In 1672 the Grand Pensionary John de Witt was torn limb from limb by an infuriated mob at The Hague, and by a strange coincidence this year marks the rise to prominence of his namesake Frederick de Wit, the cartographer, through his purchase of the plates which escaped destruction in the fire that ended the career of the house of Blaeu. Some of the most beautiful plates of the century came from the hands of de Wit, notably a wonderful *mappemonde* which was afterwards used by Carolus Allard.

The elder de Wit had begun as an engraver of maps in 1648; and the firm, which lasted until 1712, produced 380 land maps and 30 sea charts, all of a high standard of workmanship.

³ See P. H. J. Baudet: *Leven en werken van Willem Jansz. Blaeu*, Utrecht, 1871.

E. L. Stevenson: *William Janszoon Blaeu, 1571-1638: A Sketch of His Life and Work*, with an especial reference to his large world map of 1605, *Hispanic Soc. of Amer. Publ. 85*, New York, 1914, with facsimile of world map of 1605 in 18 sheets and key plate.

SIGNIFICANCE OF THE PERIOD

The period is interesting because it represents the high-water mark of decoration as applied to maps, and the influence of the movement lasted well into the eighteenth century, although a gradual deterioration, both in drawing and coloring, is easy to trace. With increasing accuracy went a loss of beauty, until the present period in cartography was reached. It is interesting to note that the use of symbols is increasing, particularly in the most recent maps, such as those for aviators, reminding us of the pictures of beasts by which the old cartographers used to illustrate the fauna of the different countries. There is at present a constant increase in the use of color as an aid to the visualization of the wide range of geographical phenomena, and it is to be hoped that the makers of maps will learn to select their shades with an eye to the decorative value of the completed whole instead of seeking only contrast. We have here the possibility of a product combining accuracy, symbolism, and color in a way never dreamed of by the Dutch of the seventeenth century.